



**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**In re Application of: KRYLIOUK et al.**

**Application No.:** 10/634,220

**Examiner:**

**Filed:** August 5, 2003

**Group Art Unit:**

**For:** GROUP III-NITRIDE GROWTH ON Si SUBSTRATE USING  
OXYNITRIDE INTERLAYER

CERTIFICATE UNDER 37 CFR 1.8(a)

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Neil R. Jetter

Commissioner for Patents  
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Date: January 16, 2004

**INFORMATION DISCLOSURE STATEMENT**

Sir:

Pursuant to the Duty to Disclose under 37 C.F.R. §1.56, Applicants hereby disclose information that may be relevant to the Examiner's consideration of the above-identified application and the patentability of its claims.

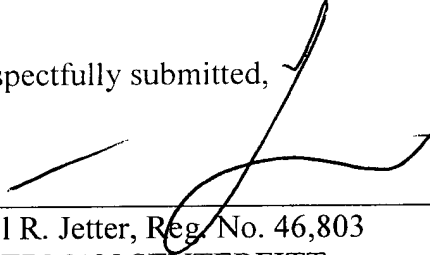
In accordance with Rules 56, 97, and 98 of the Rules of Practice in Patent Cases (37 C.F.R. §§ 1.56, 1.97, and 1.98), Form PTO/SB/08B and copies of references cited therein are submitted for consideration by the Examiner. While the references provided in this Information Disclosure Statement may be material to patentability pursuant to 37 C.F.R. § 1.56, it is not intended to constitute an admission that any reference referred to herein is prior art for this invention unless specially designated as such. Also, in accordance with 37 C.F.R. § 1.97(g), the

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filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. § 1.56(a) exists.

This Information Disclosure Statement is being filed before the issuance of a first office action on the merits of the application (37 C.F.R. 1.97(b)(3)); therefore, no fee is believed to be due. However, if any fee is due, the Commissioner is authorized to charge any such fee and any additional fees due or credit any overpayment to Deposit Account No. 50-0951.

Respectfully submitted, 

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Docket No. 5853-413



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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Complete if Known</b>	
		Application Number	10/634,220
		Filing Date	August 5, 2003
		First Named Inventor	Kryliouk et al.
		Art Unit	
		Examiner Name	
Sheet 1	of 1	Attorney Docket Number	5853-413

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		NIKISHIN et al., "High quality GaN grown on Si(111) by gas source molecular beam epitaxy with ammonia," Applied Physics Letters, 75:2073-2075, 1999	
		ZHANG et al., "Enhanced optical emission from GaN films grown on a silicon substrate," Applied Physics Letters, 74:1984-1986, 1999	
		LINTHICUM et al., "PROCESS ROUTES FOR LOW DEFECT-DENSITY GAN ON VARIOUS SUBSTRATES EMPLOYING PENDEO-EPITAXIAL GROWTH TECHNIQUES," MRS Internet J. Nitride Semicond. Res. 4S1, G4.9, 1999	
		STRITTMATTER et al., "Low-pressure metal organic chemical vapor deposition of GaN on silicon(111) substrates using an AIAs nucleation layer," Applied Physics Letters, 74:1242-1244, 1999	
		SANCHEZ-GARCIA et al., "Ultraviolet electroluminescence in GaN/AlGaIn single-heterojunction light-emitting diodes grown on Si(111)," Journal of Applied Physics, 87:1569-1571, 2000	

Examiner Signature	Date Considered
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